

Remarks:

Reconsideration of the application is requested.

Claims 1-3 and 5-13 remain in the application. Claim 1 has been amended. Claim 4 has been cancelled. Claims 12-13 have been withdrawn from consideration.

In item 2 on pages 2-3 of the above-mentioned Office action, claims 1-3 and 9 have been rejected under 35 U.S.C. § 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Stoisiak et al. (US Pat. No. 6,310,401). In item 7 on pages 5-7 of the above-mentioned Office action, claims 1-7 have been rejected under 35 U.S.C. § 102(e) as being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Choi (US Pat. No. 6,404,065).

The rejections have been noted and claim 1 has been amended in an effort to even more clearly define the invention of the instant application. Support for the changes is found original claim 4.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia:

a substrate body having an insulating ceramic layer with a top side, and a metal layer fixedly joined to said top side of said insulating ceramic layer, said substrate body being one of a direct copper bonded (DCB) substrate and an active metallic brazed (AMB) substrate;

at least one connection conductor joined to said metal layer by laser welding. (Emphasis added.)

Neither Stoisiak et al. nor Choi disclose laser welding directly on the top side of a DCB substrate or an AMB substrate. An important aspect of the invention of the instant application is that until the invention of the instant application, laser welding directly on the top surface of a DCB or AMB substrate was considered as being impossible to be carried out. Stoisiak et al. do not show that a connection connector is welded directly on the top surface of the substrate and under no circumstances do Stoisiak et al. show laser welding being used.

However, the Examiner considers the manner in which the connection is being made to be unimportant because, according to his opinion, whether the connection is by welding or any other process does not affect the patentability of a product claim. Applicants respectfully disagree. Applicants are of the opinion that one can indeed determine from the end product how the connection had been made. Welding and, in particular, laser welding can be shown at the finished product and a laser weld is a structure feature distinct from other connections.

In addition, the weld recited in claim 1 is not a product-by-process limitation.

Clearly, neither Stoisiak et al. nor Choi show "said substrate body being one of a direct copper bonded (DCB) substrate and an active metallic brazed (AMB) substrate; at least one connection conductor laser-welded to said metal layer", as recited in claim 1 of the instant application.

Claim 1 is, therefore, believed to be patentable over the art and since claims 2-7 and 9 are ultimately dependent on claim 1, they are believed to be patentable as well.

In item 4 on page 4 of the above-mentioned Office action, claim 8 has been rejected as being unpatentable over Stoisiak et al. in view of Schulz-Harder (US Pat. No. 6,297,469) under 35 U.S.C. § 103(a).

As discussed above, claim 1 is believed to be patentable over the art. Since claim 8 is dependent on claim 1, it is believed to be patentable as well.

In item 5 on pages 4-5 of the above-mentioned Office action, claims 10-11 have been rejected as being unpatentable over Stoisiak et al. in view of Crowley et al. (US pat. No. 6,521,982) under 35 U.S.C. § 103(a).

As discussed above, claim 1 is believed to be patentable over the art. Since claims 10-11 are ultimately dependent on claim 1, they are believed to be patentable as well.


In view of the foregoing, reconsideration and allowance of claims 1-3 and 5-11 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

LAURENCE A. GREENBERG
REG. NO. 29,308



For Applicants

YHC:cgm

June 24, 2003

Lerner and Greenberg, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480
Tel: (954) 925-1100
Fax: (954) 925-1101